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ABSTRACT

This study examined the prevalence of different program models for early childhood special education services (ECSE) to children with disabilities, ages 3-5, in Iowa. The degree to which children in ECSE programs received special education services in settings with their peers who did not have disabilities was also investigated. The study sample represented 20 percent of Iowa children enrolled in ECSE center-based programs, randomly selected; 536 usable surveys were obtained. Interviews were conducted with each child's primary special education provider. It was found that roughly 71 percent of ECSE children are placed in program models designed to provide services solely to children in special education. Program models included self-contained ECSE programs (66.2%), co-located special education programs (13%), and self-contained ECSE programs plus community-based early childhood proramming (9.1%). The amount of integration with peers who were not disabled varied significantly for different program models. The majority (66.4%) of children in the sample received less than 10 percent of their special education services in settings with their peers without disabilities. The survey instrument is appended, along with definitions of program models. (Author/SW)

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ED 385 984

Early Childhood Special Education
Least Restrictive Environment Study
(3 through 5 Year Olds)
Spring 1994

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Table of Contents

List of Tables ii

List of Figures iii

Abstract 1

Introduction 2

Method 3

Materials 3

Data Collector Training 4

Sample 5

Procedure 5

Results 6

Return Rate 6

Research Question #1 8

Research Question #2 10

Research Question #3 20

Research Question #4 20

Discussion 23

Conclusions 23

Implications 25

Limitations of the Study 25

Future Directions 26

Reference 28

APPENDIX A

Early Childhood LRE Survey 29

APPENDIX B

Program Model Definitions 32

APPENDIX C

Iowa AEA Boundaries 35

List of Tables

Table 1: Distribution of final sample by AEA and Des Moines 7

Table 2: Average percent of time in integrated settings by program model.....13

Table 3: Monitoring responsibility by program model.....20

Table 4: Frequency of use of potential special education settings 22

List of Figures

Figure 1: Percent of sample served in different service delivery models 8

Figure 2: Percent of sample served in integrated/non-integrated program models.....10

Figure 3: Percent of sample receiving ECSE services with typical peers.....11

Figure 4: Special education time per week by integration status.....14

Figure 5: Percent of special education time that special education students are integrated with their non-disabled peers - **all program models included** 15

Figure 6: Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained early childhood special education programs (Moderate/Severe)**.....16

Figure 7: Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained early childhood special education programs (Mild/Moderate)**.....16

Figure 8: Percent of special education time that special education students are integrated with their non-disabled peers - **Co-location**.....17

Figure 9: Percent of special education time that special education students are integrated with their non-disabled peers - **Special education in a community-based early childhood program**.....17

Figure 10: Percent of special education time that special education students are integrated with their non-disabled peers - **Reverse integration program** 18

Figure 11: Percent of special education time that special education students are integrated with their non-disabled peers - **Residential setting**.....18

Figure 12: Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained (Moderate/Severe) and community-based early childhood program** 19

Figure 13: Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained (Mild/Moderate) and community-based early childhood program** 19

Abstract

This study examined the prevalence of different educational program models for providing early childhood special education services (ECSE) to children ages 3 through 5 years in Iowa. This study also investigated the degree to which children in ECSE programs received special education services in settings with their non-disabled peers. Twenty percent of Iowa children enrolled in ECSE center-based programs were randomly selected for inclusion in this study. Data were collected through interviews with each child's primary special education provider. Results indicated that roughly 71 percent of ECSE children are placed in program models designed to provide services solely to children in special education. Roughly two-thirds of the children (66.2 percent) in the overall sample received services in self-contained early childhood special education programs (Mild/Moderate). The next most prevalent program models were (a) co-located special education programs (13.0 percent) and (b) self-contained ECSE programs (Mild/Moderate) plus community-based early childhood programming (9.1 percent). This study also documented that the amount of integration with non-disabled peers varied significantly from program model to program model. A large majority of children in this study (66.4 percent), however, received less than 10 percent of their special education services in settings with their non-disabled peers. Implications of these data for influencing LRE practices in ECSE are discussed.

Early Childhood Special Education Least Restrictive Environment Study

(3 through 5 Year Olds)

Introduction

The Iowa Department of Education, Bureau of Special Education, has played an active role in facilitating an initiative to increase opportunities for young children with disabilities to participate in educational programs with their non-disabled peers. Through a variety of technical assistance activities, the Bureau has supported area education agency and local education agency efforts to develop new programs or modify existing programs to offer special education programs and services in integrated early childhood (EC) settings. Technical assistance efforts have included: facilitating planning activities, providing a variety of staff development activities, providing on-site consultation, and disseminating print and media materials on integration.

As part of a 1992 effort to evaluate the changes occurring in early childhood special education programs (ECSE), a study was conducted to identify the number of children with disabilities served in integrated programs in Iowa. A one-page survey was mailed to the primary ECSE provider for each ECSE child (3 through 5 years) in Iowa asking for information related to that child's ECSE program. Directions for completing the survey were included with each survey. After surveys were returned, it became clear that methodological and definitional problems precluded meaningful interpretation of the data. Most importantly, this study identified that there was a lack of consistency in how Iowa ECSE providers interpreted the terminology used to describe program models and program settings that were used to provide ECSE services.

In the Fall of 1993, the Bureau of Special Education distributed *Procedures for the Provision of Early Childhood Special Education Programs and Services in the Least Restrictive Environment* (Iowa Department of Education, Bureau of Special Education, 1993). This document provided definitions of general education and special education programs and services for young children with disabilities. Prior to publication of this document, many of the programs and services described were being implemented in Iowa. There was, however, little consistency in how Iowa

educators used terminology regarding the least restrictive environment (LRE) requirements in ECSE.

During the 1993-94 school year a second study was conducted to examine special education services provided to eligible children ages 3 through 5 years in Iowa. The primary focus of this study was to identify the proportion of eligible children receiving services in each of the ECSE program models available in Iowa. Four research questions were addressed:

(1) How frequently is each program model used to serve preschool children (ages 3 through 5 years) requiring special education?

(2) For what percentage of time do children in ECSE participate with their non-disabled peers?

(3) Which professionals are responsible for monitoring the Individualized Education Programs (IEPs) of ECSE children in community-based early childhood programs?

(4) How frequently are various settings used in the provision of special education services?

Method

Materials

Materials consisted of one protocol per child (see Appendix A) and one set of program model definitions per data collector (see Appendix B). The protocol contained four sections that corresponded to the four research questions. Prior to widespread implementation, an early version of the protocol was used to interview three ECSE teachers for survey development purposes. Based on input from these interviews, the survey was redesigned to include scripted directions for interviewers. The interviewers were trained to read these directions verbatim when completing protocols to ensure standardized administration.

A critical component in completion of this study was defining terms precisely. Experience with a previous ECSE-LRE study suggested that, in the absence of precise definitions, different ECSE teachers often used the same terms differently. This concern was especially problematic for determining the nature of the program model being used to deliver ECSE services. To attenuate the problem of inconsistent definitions in the current study, three actions were taken. First, an interview format was used to collect data rather than sending surveys directly to teachers. This

format allowed trained interviewers to determine the nature of a child's service delivery model and then make a judgment about which one of the study's categories most closely fit the model described. Second, written definitions were provided for interviewers' use. These definitions were based on definitions presented in Iowa's *Procedures for the Provision of Early Childhood Special Education Programs and Services in the Least Restrictive Environment* (1993). Program model definitions were created to be mutually exclusive so that any individual child's program must fit in one and only one program model definition. The final action taken to ensure consistency in coding required data collectors to validate their coding of program models. Data collectors were required to read the written definition of the selected program model to the person being interviewed and ask if that description accurately reflected the individual child's program. If the definition did not match, further questions were asked until the appropriate program model was determined. This step ensured accurate representation of actual program models.

Data Collector Training

All data collectors were trained during one 4-hour training session approximately 1 week before data collection began. Trainers were the second and fourth authors. Data collectors from each of the 15 intermediate education units (Area Education Agencies; AEAs) in Iowa were recruited (see Map in Appendix C). One or two persons per AEA, who were knowledgeable about ECSE issues, were selected by the AEA Supervisor of ECSE to serve as data collectors. Data collectors' per diem salary and expenses were paid by the Iowa Department of Education for the time spent on training and data collection. During data collector training, the purpose of the study, data collection procedures, and data collection protocols were reviewed. Data collectors were asked to read definitions of the program models carefully and review student protocols. Next, they were asked to determine appropriate program models for scenarios presented orally by the trainers. Differences in responses were discussed at a large group level to facilitate consistency in coding. After three successive program model questions were coded consistently by over 90 percent of the large group, the next phase of training began.

Each data collector completed four practice protocols on hypothetical written scenarios provided by the trainers. Each hypothetical case was reviewed by the trainers with feedback provided on a case-by-case basis. Each data collector then completed two final cases to assess accuracy of data collector scoring. Accuracy was calculated using the overall agreement method described by Sulzer-Azaroff and Mayer (1991). Agreement on all sections of the protocol exceeded .90 using the trainers' ratings as the criterion.

Sample

Iowa's total December 1, 1993 special education child count of preschool children ages 3 through 5 was 5643. To enhance the clarity of results, children who received only a support service (n = 2863) were not included in this sample. Twenty percent of the remaining 2780 children in ECSE (n = 556) were selected randomly from the 1993 unduplicated state count. Selection was stratified by AEA. In other words, 20 percent of ECSE children 3 through 5 year olds were selected randomly from within each AEA and the data were aggregated into a state-level report. Using this methodology, inferences about ECSE programs can be made both for AEAs and for the state as a whole. No other stratification variables were used. Hence, this report will not make inferences related to factors such as gender, race and ethnicity, and severity of disability.

Procedure

Data collectors were trained and surveys were disseminated in March and early April of 1994. When interviews were completed, approximately 2 months of school remained. Data collectors were given approximately 6 weeks to complete their interviews. Each data collector was given a list of children's state identification numbers from within their AEA and a corresponding number of blank protocols. An additional list of "alternate ECSE children" was provided for each data collector to use if an individual child or teacher was unavailable. In these cases, the data collectors were instructed to identify the unavailable child's ID number, to note that data were unavailable and submit the blank protocol along with the completed protocols. They were then directed to select the next child on the alternate list and complete an interview for that child. Thus the actual return rate could be calculated.

Data collectors were allowed to work on their own schedules but were asked to call teachers during hours when children were not likely to be in the classroom. Interviews took place either in person or on the telephone, and interviews took an average of approximately 8 minutes.

Results

Return Rate

A total of 556 cases were requested from across Iowa. A total of 582 surveys were returned to the researchers (105 percent of requested). Of this 582 surveys, 29 (5 percent) were not completed because either the child no longer resided in the district, the child was deceased, or the teacher was not available. In these cases, a replacement child was selected from a list of randomly-selected alternates and a survey completed. Of the remaining 553 completed surveys, 17 (3 percent) were not usable because of significant missing data or inaccurate data (e.g., the number of integrated minutes listed on the survey exceeded the total number of educational minutes that a child received). These surveys were deleted from the final sample. Thus, the final data set contained complete data on 536 children's ECSE programs. This sample represents a 96.4 percent return rate based on the original requested sample. A breakdown of the number of cases requested and contributed by each AEA is contained in Table 1.

Table 1

Distribution of final sample by AEA and Des Moines

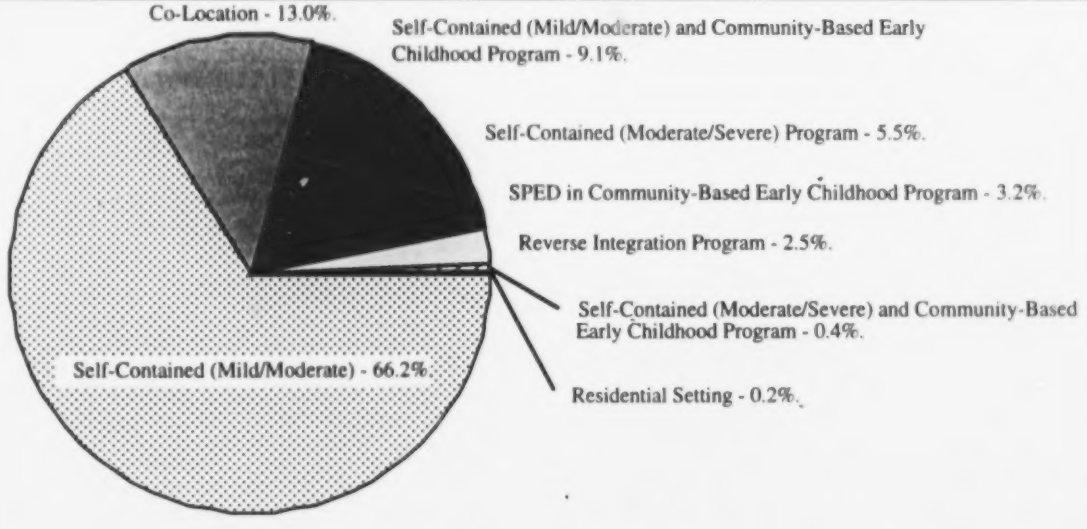
AEA	Number of Surveys Requested	Percent of Requested Sample	Usable Surveys Returned	Percent of Final Sample
Des Moines	47	8.5	47	8.8
1	32	5.8	30	5.6
2	26	4.7	26	4.9
3	18	3.2	17	3.2
4	14	2.5	14	2.6
5	29	5.2	29	5.4
6	27	4.9	28	5.2
7	26	4.7	26	4.9
9	63	11.3	56	10.4
10	50	9.0	50	9.3
11	75	13.5	69	12.9
12	34	6.1	33	6.2
13	37	6.7	37	6.9
14	15	2.7	13	2.4
15	34	6.1	34	6.3
16	29	5.2	27	5.0
State Total	556	100.0	536	100.0

Research Question #1: How frequently is each program model used to serve preschool children (ages 3 through 5 years) requiring special education?

To examine the question of which program models were used most frequently to provide special education services, a frequency analysis was conducted. The number of children receiving services in each program model was tabulated for the entire sample. Then, the number of children in each program model was divided by the total number of children in the sample and multiplied by 100. The resulting number represents the percentage of children in the overall sample receiving services in each program model. Figure 1 represents graphically the percentage of children in this sample who receive ECSE services in each program model.

Figure 1

Percent of sample served in different service delivery models (n = 530)


Co-Location - 13.0%.
Self-Contained (Mild/Moderate) and Community-Based Early Childhood Program - 9.1%.
Self-Contained (Moderate/Severe) Program - 5.5%.
SPED in Community-Based Early Childhood Program - 3.2%.
Reverse Integration Program - 2.5%.
Self-Contained (Moderate/Severe) and Community-Based Early Childhood Program - 0.4%.
Residential Setting - 0.2%.
Self-Contained (Mild/Moderate) - 66.2%.

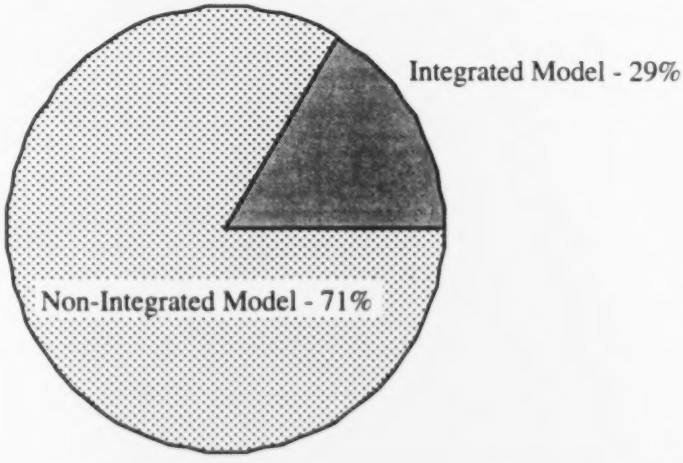
Note. - In-patient hospital setting accounted for 0%.
Home Instruction accounted for 0%.
Six children were not included in this analysis due to missing data.

Self-contained program models, either alone or combined with community-based services, were by far the most frequent program models used in Iowa. Completely integrated or community-based programs were provided to a much smaller group of children in ECSE, but were present at a significant level. The most restrictive program models (e.g., home instruction, hospital, and residential settings), while available in Iowa, were used very infrequently to provide services to children ages 3 through 5.

To summarize results by different types of placements, ECSE program models were grouped into two categories: integrated models and non-integrated models. Integrated models included models that, by definition, contain children without disabilities. The integrated models included: Co-location, Self-Contained (Moderate/Severe or Mild/Moderate) along with a Community-Based Early Childhood Program, Special Education Services in a Community-Based Early Childhood Program, and Reverse Integration programs. Non-integrated models included: Self-Contained Programs (both Moderate/Severe and Mild/Moderate), Residential Settings, In-patient Hospital Settings, and Home Instruction. A graphic depiction of the percentage of 3 through 5 year olds receiving ECSE in integrated versus non-integrated program models is contained in Figure 2.

Figure 2

Percent of sample served in integrated/non-integrated program models (n = 530)



Note. - Six children were not included in this analysis due to missing data.

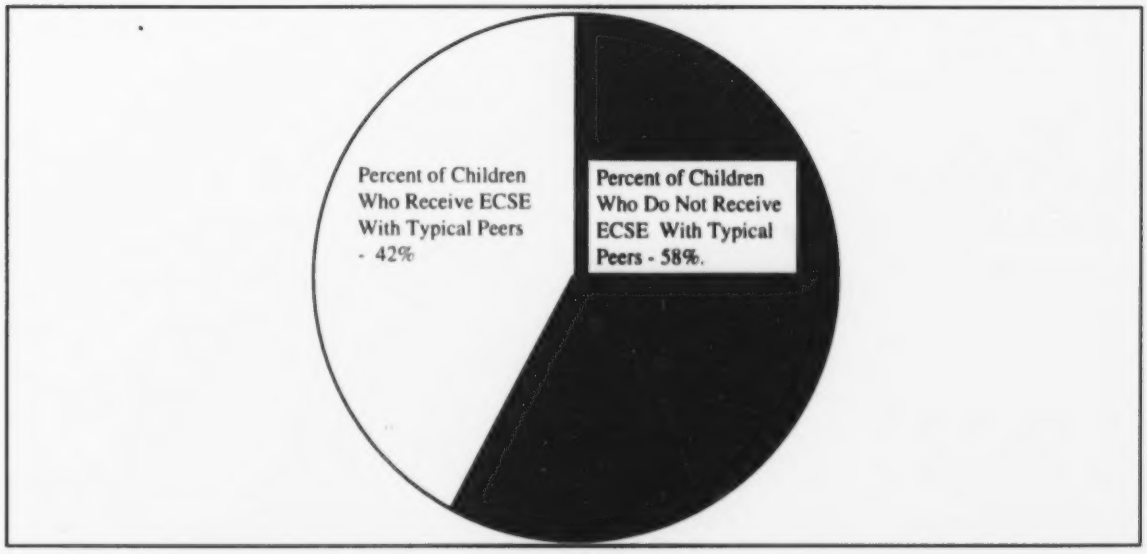
The majority of children in ECSE programs (ages 3 through 5) receive special education services in non-integrated program models.

Research Question #2: For what percentage of time do children in ECSE participate with their non-disabled peers?

While the analysis of program models provides some information related to the restrictiveness of special education programming, program model is a very general estimator. Integration opportunities can vary widely from student to student even within the same program model. To provide a more precise description of the restrictiveness of ECSE programs, a series of analyses were conducted to examine the amount of time that children in ECSE programs spent receiving education with their non-disabled peers. The first of these analyses examined the percentage of the sample who received any special education services in settings with typical peers. Results from this analysis are contained in Figure 3.

Figure 3

Percent of sample receiving ECSE services with typical peers (n = 536)


Percent of Children Who Receive ECSE With Typical Peers - 42%
Percent of Children Who Do Not Receive ECSE With Typical Peers - 58%.

Results presented in this graph provide a more precise indication of number of children with integration opportunities than does the analysis of ECSE program model (see Figures 1 and 2). Instead of examining numbers of children placed in different types of program models, this analysis examined individual children's opportunities for integration within ECSE. Results of the current analysis suggests that roughly 42 percent of the 3 through 5 year olds in ECSE receive at least part of their ECSE in settings with their non-disabled peers. If an analysis of only program models and program placement had been conducted (i.e., research question #1), results would have underestimated the number of children receiving integrated ECSE by approximately 12 percent.

Because LRE issues relate to a child's total educational program, it was important to examine both percent of special education time spent in integrated settings as well as percent of total educational time spent in integrated settings. Thus, two different ratios were calculated for each program model. Average percent of special education time spent with non-disabled peers was calculated first. In this analysis, the average number of minutes spent receiving special education

services was calculated for the children in each program model. Then, the average number of minutes spent receiving special education with non-disabled peers was calculated for the children in each program model. Average special education minutes with typical peers were divided by average minutes of special education service for each program model and multiplied by 100. Results from this analysis are reported in the second column in Table 2. Additionally, a graphic representation of integrated/non-integrated minutes by program model is contained in Figure 4.

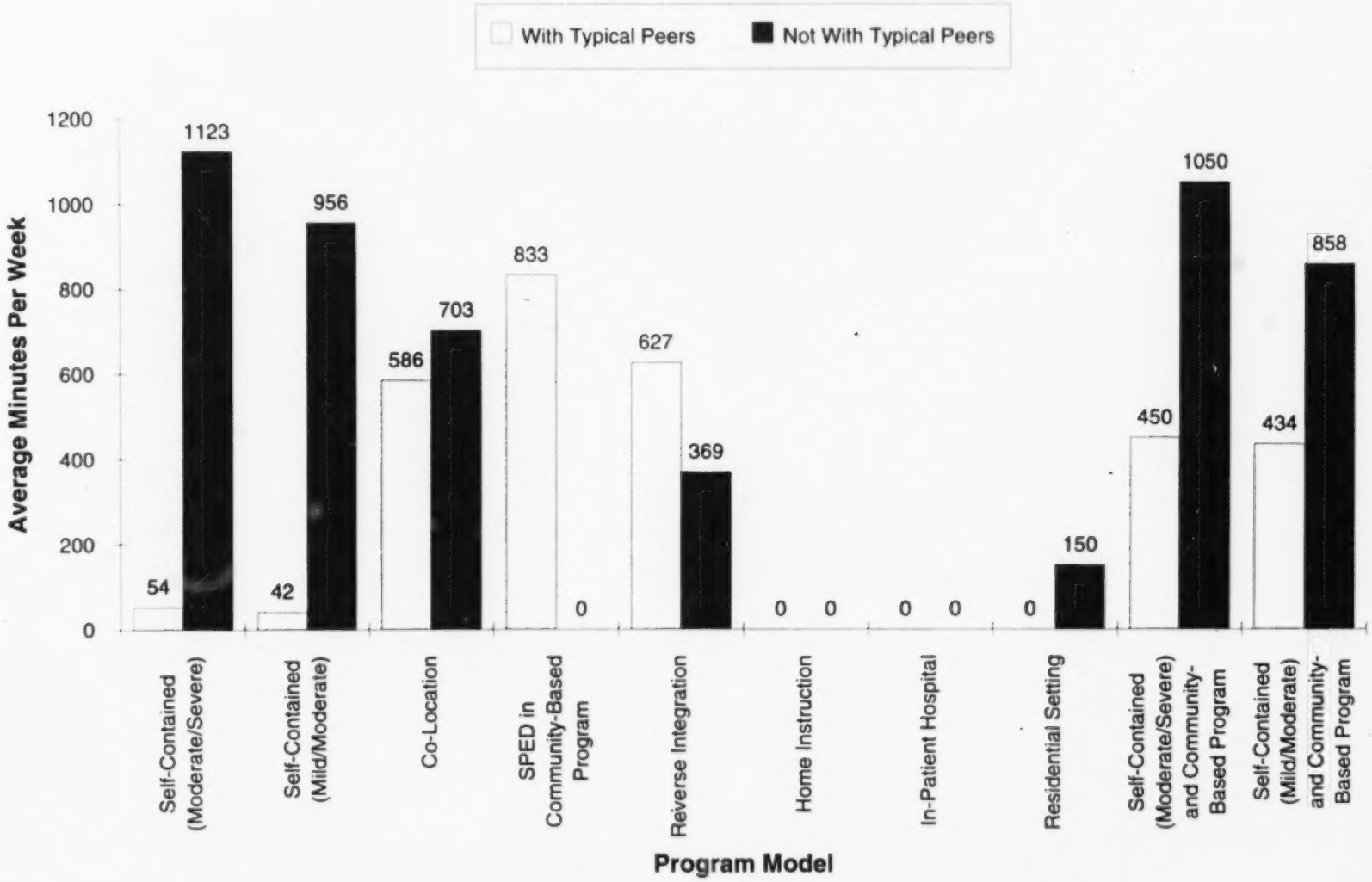
Average percent of all educational time spent with non-disabled peers was calculated next. A variable representing the total amount of all educational time (AET) was calculated for each child by adding together all special education minutes per week and all general education minutes per week (15.5 percent of ECSE children received supplemental general education services that were not part of their IEP- typically public kindergarten). The average AET was then calculated for each program model. Next, the total number of minutes spent receiving education with non-disabled peers was calculated for each child. In this analysis, supplemental general education minutes were coded as "education with non-disabled peers." These minutes were added to special education minutes where children received services with typical peers to yield a total number of integrated minutes for each child. The average number of integrated minutes then was calculated for each program model. Finally, average integrated minutes were divided by AETs for each program model and multiplied by 100. Results from this analysis are reported in the third column in Table 2.

Table 2

Average percent of time in integrated settings by program model

Program Model	Average Percent of ECSE Time Spent With Non-disabled Peers	Average Percent of All Educational Time Spent With Non-disabled Peers
ECSE (Moderate/Severe)	4.6%	4.6%
ECSE (Mild/Moderate)	4.2%	7.0%
Co-Location	45.5%	57.0%
Special Education Instruction in a Community-Based Early Childhood Program	100.0%	100.0%
Reverse Integration Program	63.0%	64.0%
Home Instruction	n/a	n/a
In-Patient Hospital	n/a	n/a
Residential Setting	0.0%	0.0%
ECSE (Moderate/Severe) and Special Education Instruction in a Community-Based Early Childhood Program	30.0%	30.0%
ECSE (Mild/Moderate) and Special Education Instruction in a Community-Based Early Childhood Program	33.6%	41.6%
Average across all program models	18.12%	23.9%

Figure 4: Special Education Time Per Week by Integration Status



Iowa ECSE Least Restrictive Environment Study - 1994

14

While average amounts of time with typical peers provide a modicum of information for making general comparisons between program models, they also may be misleading. For example, if half of the children in a program model were integrated 100 percent of the time and the other half of the children in that same program model were integrated for 0 percent of the time, the average percent integration would be 50 percent. While this number is the average amount of integration time, not one child received integration at that rate, thus misrepresenting reality.

To address this problem, frequency distributions were created to depict the distribution of integration for each program model. These distributions represent integration within special education programming only. Distributions depicting integration across all educational settings would vary slightly from the distributions in this section. Figure 5 illustrates the distribution of percent of special education time with typical peers for all children in the sample across all program models. Figures 6 through 13 contain frequency distributions of amount of integration for individual program models.

Figure 5

Percent of special education time that special education students are integrated with their non-disabled peers - **all program models included**

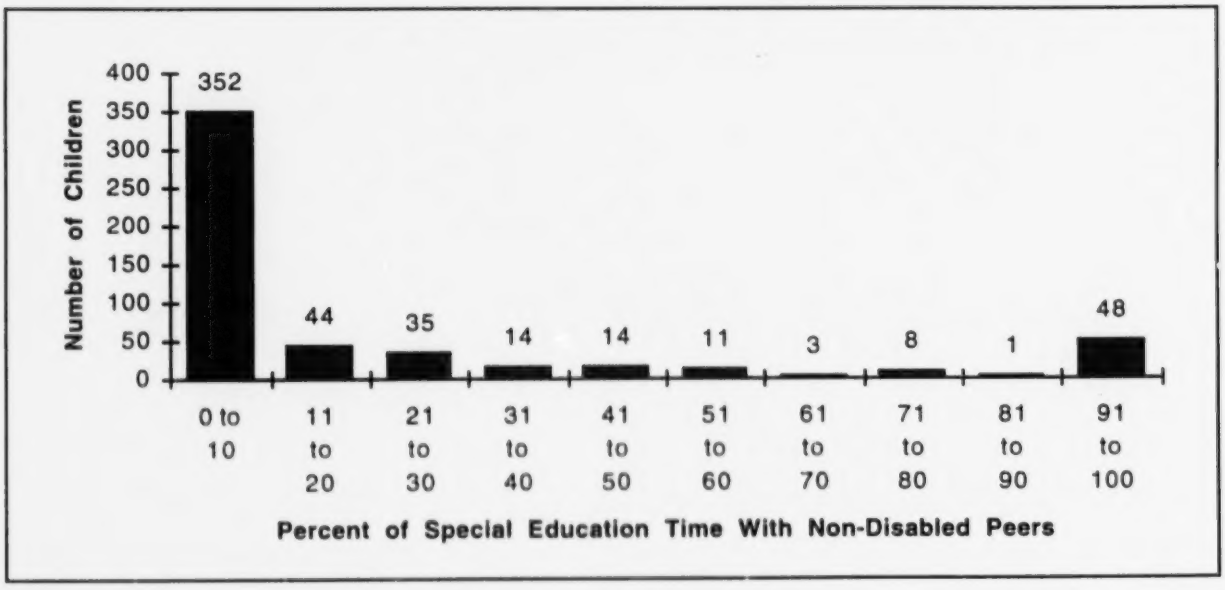


Figure 6

Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained early childhood special education programs (Moderate/Severe)**

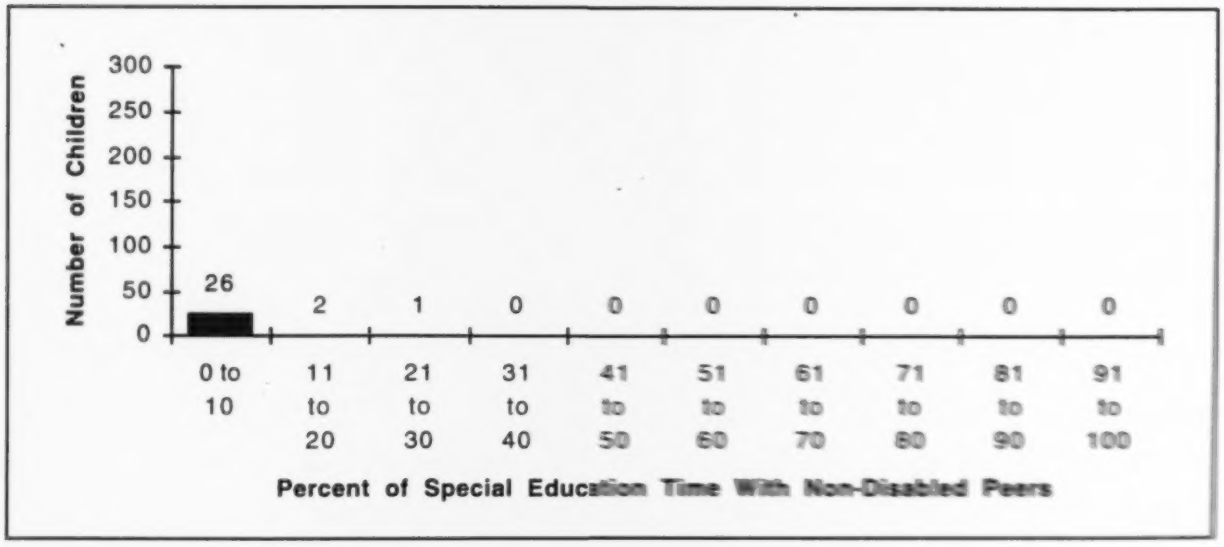


Figure 7

Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained early childhood special education programs (Mild/Moderate)**

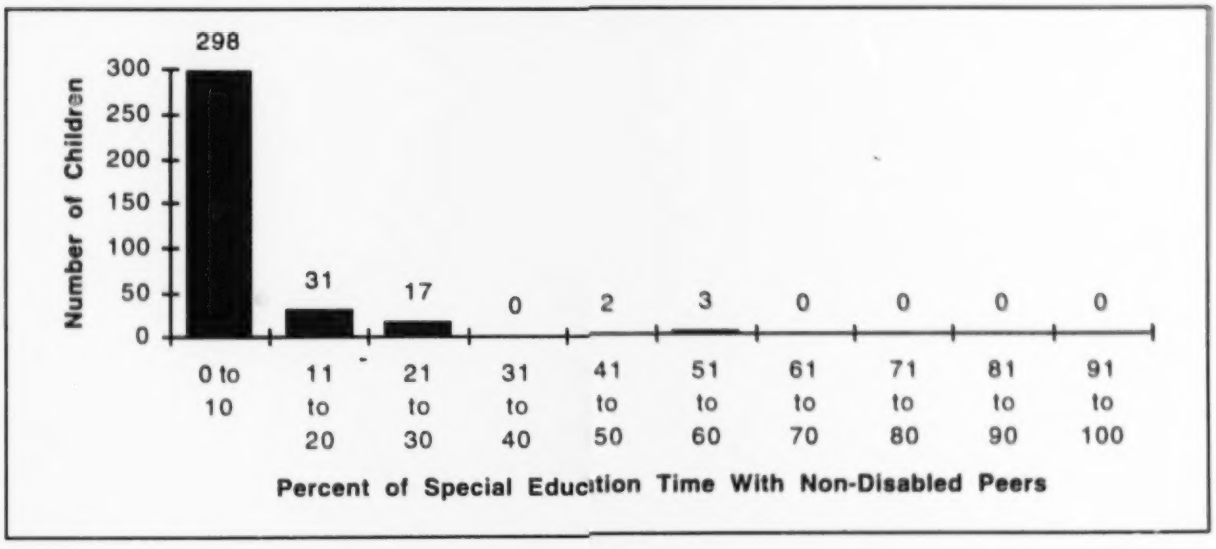


Figure 8

Percent of special education time that special education students are integrated with their non-disabled peers - **Co-Location**

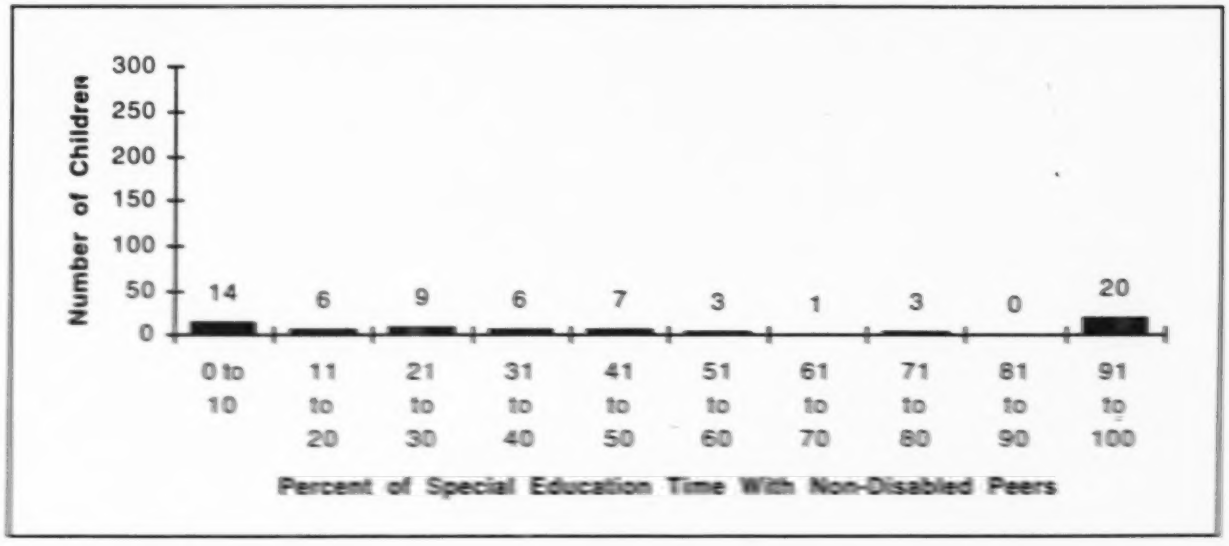


Figure 9

Percent of special education time that special education students are integrated with their non-disabled peers - **Special education in a community-based early childhood program**

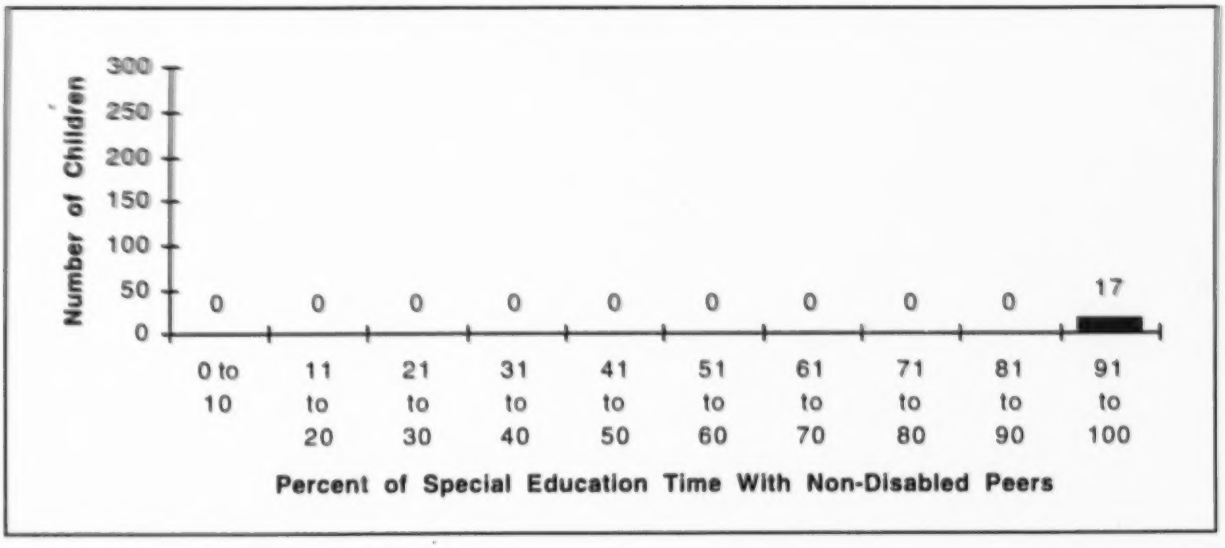


Figure 10

Percent of special education time that special education students are integrated with their non-disabled peers - **Reverse integration program**

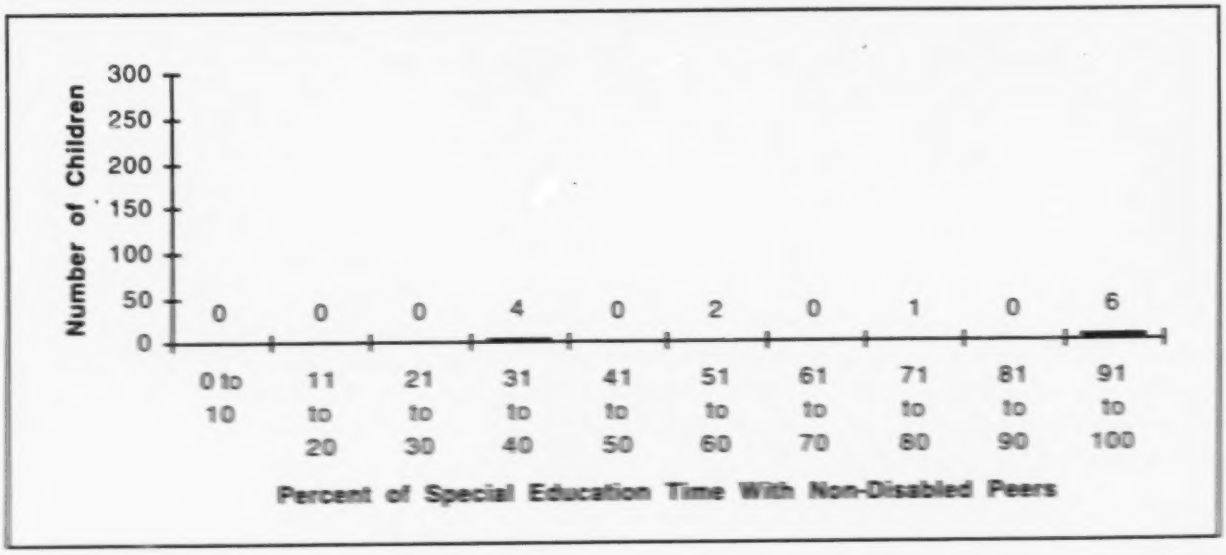


Figure 11

Percent of special education time that special education students are integrated with their non-disabled peers - **Residential Setting**

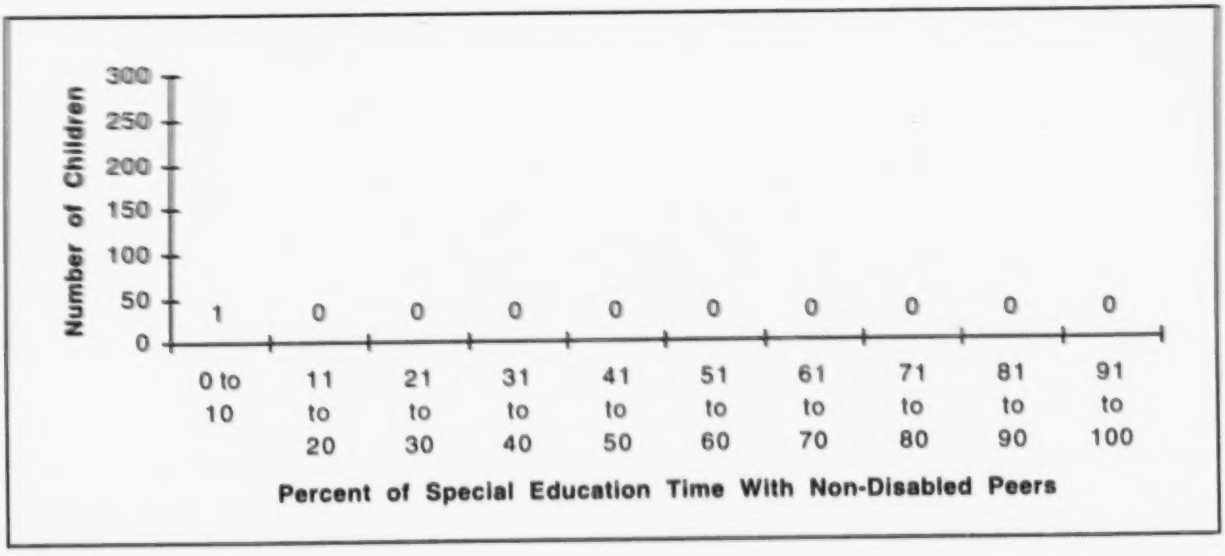


Figure 12

Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained (Moderate/Severe) and community-based early childhood program**

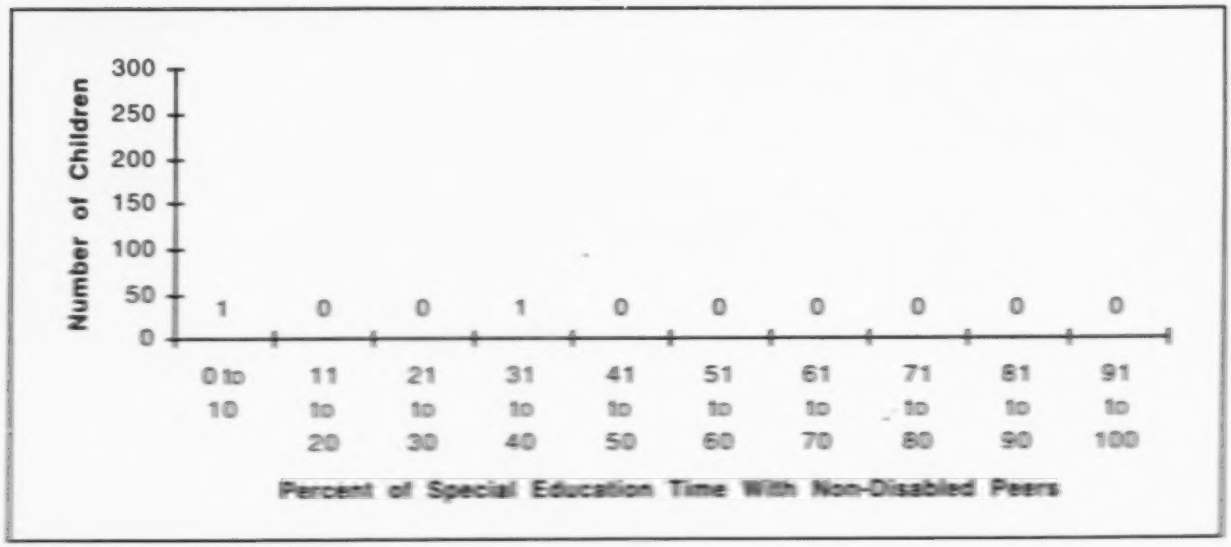
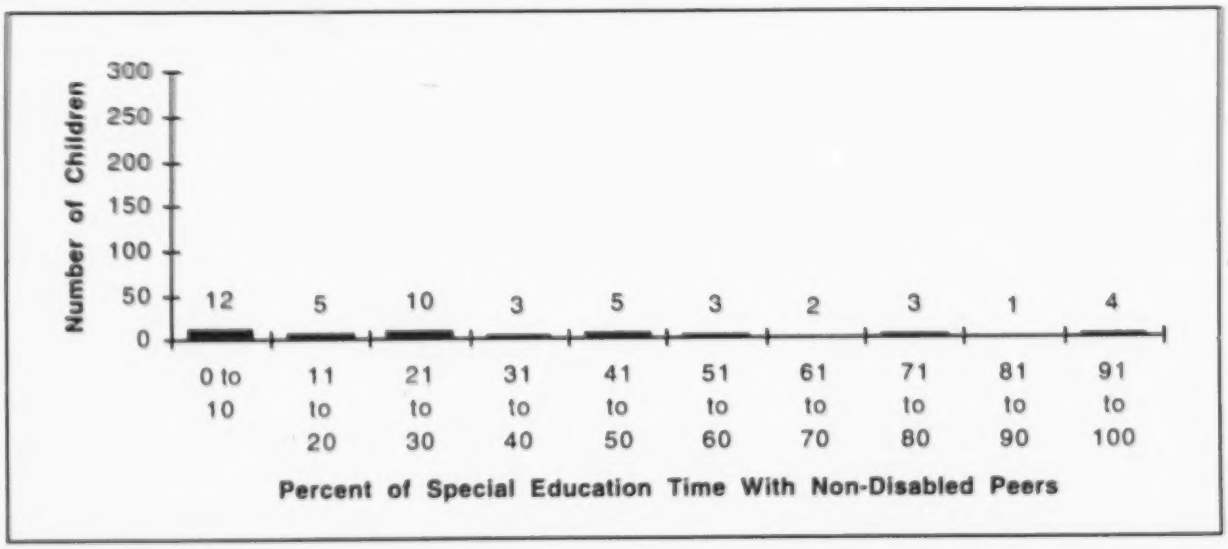


Figure 13

Percent of special education time that special education students are integrated with their non-disabled peers - **Self-contained (Mild/Moderate) and community-based early childhood program**



Research Question #3: Which professionals are responsible for monitoring the IEPs of students in community-based early childhood programs?

To determine which professionals were most frequently responsible for monitoring special education services for children placed in community-based early childhood programs, respondents were asked to identify each child's IEP monitor (see question 20 in Appendix A). A breakdown of IEP monitor's professional position by program model is contained in Table 3.

Table 3

Monitoring responsibility by program model

Professional Title	Community-Based Early Childhood Program	Self-Contained (Moderate/ Severe) and Community-Based EC Program	Self-Contained (Mild/Moderate) and Community-Based EC Program
ECSE Teacher	14	1	30
ECSE Consultant	4	0	4
ECSE LRE Facilitator	0	0	13
Multiple ECSE Professionals	1	1	3

Note. Data from three cases were not reported due to missing data.

Research Question #4: How frequently are various settings used in the provision of special education services?

The final question examined the nature of the settings that are used to provide special education services to children in ECSE programs. In some cases, there was a one-to-one correspondence between a setting and a program model (e.g., self-contained classroom for

children with Moderate/Severe disabilities). In other cases, there are different permutations of settings that might be used to satisfy the requirements of a program model (e.g., Co-location programs). Because of this situation, an analysis of special education settings was conducted. For each potential setting where special education might be provided, the frequency of use was calculated across the entire sample. This frequency was divided by the sample size and multiplied by 100 to yield a percent score representing the percent of the total sample that receives at least part of their special education in that setting. Results from this analysis are contained in Table 4.

Table 4

Frequency of use of potential special education settings

Setting	Frequency	Percent of Total Sample Receiving Services in This Setting
Head Start Classroom	42	7.8
Community-Based Preschool Designed for Non-Disabled Children	25	4.7
Community-Based Child Care Designed for Non-Disabled Children	8	1.5
At Risk Classroom	10	1.9
Chapter 1 Early Childhood Classroom	0	0.0
Kindergarten	60	11.2
LEA Sponsored Preschool for Non-Disabled Children	20	3.7
Home Intervention	8	1.5
In-Patient Hospital	0	0.0
Residential Setting	1	0.2
Early Childhood Self-Contained Classroom	513	95.7
Other*	12	2.2

* Other includes individual provision of related services and itinerant teaching.

Note. The number of settings where ECSE was delivered exceeds the number of children because some children receive ECSE in more than one setting.

Discussion

This study examined the extent to which children in ECSE programs are educated in the least restrictive environment possible. Approximately 20 percent of children (3 through 5 years) in ECSE programs in Iowa were included in this study. Interviews were conducted with each child's primary ECSE service provider and 20 questions related to LRE issues were answered.

Conclusions

Four conclusions appear warranted from the results of the current study. First, it is clear that the ECSE program models were not used equally when providing ECSE. Some program models were used with a majority of children in ECSE while other program models were used rarely if ever. By far the most prevalent model for ECSE service delivery is self-contained classrooms, either alone, or less frequently in combination with a community-based program. This finding is not surprising given the predominant structure of preschool educational services in Iowa (as well as nationally). There is generally not a public mandate to provide educational services to typical children below age 6, resulting in few publicly-funded programs in a community that could be used in educating young children with disabilities. ECSE programs often are created with special education funds to serve only special education children. This practice usually translates into self-contained ECSE programs for preschool-aged children.

A second conclusion is that on average, children in Iowa ECSE programs spend less than 20 percent of their special education time in settings with their non-disabled peers. This finding could be interpreted in different ways. It may be that the low frequency of integration reflects the lack of educational integration options available within Iowa communities for young children with disabilities. If this is the case, an effort would be needed to increase available options. It is possible, however, that integrated program options are available within communities but that IEP teams select the more restrictive options as most appropriate for young children with disabilities. It may, therefore, be important to examine the appropriateness of alternative program models for meeting individual children's needs prior to promoting education in less restrictive environments.

Promotion of LRE in this case could take the form of educating members of IEP teams to the benefits of ECSE in integrated settings.

The third conclusion is that ECSE program models vary widely in the amount of integration provided. For example, a large majority of children in the self-contained (Mild/Moderate) program model receive 10 percent or less of their ECSE in settings with their non-disabled peers. Children in community-based EC programs received 100 percent of their special education services in integrated settings. These data support the obvious conclusion that the type of program model in which a child participated was related to the amount of integration received. The more restrictive the program model, the less the integration. Beyond this finding, however, lies an equally important one. Within certain program models (especially co-location and self-contained plus community-based EC) there was a high degree of variability in amount of integration provided to preschoolers. One interpretation of these data might be that these programs are inconsistent in the manner in which they provide integration opportunities to children. If true, this finding might imply that the quality of planning for integration varies substantially from one ECSE provider to the next. An alternative explanation of these data is that these program models actively attend to the LRE component in special education and program individually (including integration activities) for children based on their unique educational needs. In this case, participating in a co-location program or a program with a community-based component would have a distinct advantage for children. That is, integration opportunities would be available immediately, within the structure of a program model, as they become appropriate to individual children's needs.

The final conclusion supported by this study is that many different settings were used in Iowa to provide ECSE services to children. While over 95 percent of ECSE children receive at least part of their services in a self-contained ECSE classroom, other community agencies and programs are beginning to accept children with disabilities into their programs and are assisting in the provision of special education services. Successful implementation of ECSE by this breadth of providers could result in increased willingness and ability on the part of community-based service providers to participate in the provision of ECSE. A major emphasis in the future will be for the Iowa

Department of Education to continue supporting and encouraging community-based service providers' participation in ECSE programming.

Implications

Much progress has been made in Iowa in bringing services to communities and children with disabilities. It is also clear, however, that much work is left to be done in creating an ECSE system that has widespread quality integration opportunities for young children. Findings from this study argue strongly for increased attendance on the part of ECSE practitioners and policy makers to the LRE provisions in the Individuals with Disabilities Education Act. Two methods to accomplish this goal are possible. The first would be to increase the availability and use of certain program models currently in place. In this study, the program models with the most integration were co-location programs and programs using the resources of community-based EC programs. Increasing the availability of these programs continues to be a goal of the Iowa Department of Education.

A second method of increasing integration would be to increase options within current ECSE program models. Additional training for professionals on LRE along with publicizing available community resources could facilitate increased awareness and utilization of less restrictive community options. No matter which approach is taken in promoting LRE, one component will be necessary. It will be important for the federal government, state education agencies, intermediate education units, and school districts to support flexible financing and creative programming for children in ECSE programs. Current funding structures often translate into overly restrictive program options. Other options are possible, but it will take a continued and concerted effort to create and maintain integrated options for the benefit of the ECSE children.

Limitations of the Study

A number of limitations must be noted when interpreting results of this study. First, the sample in this study is representative of programs in Iowa. Comprehensive service delivery models in Iowa may differ in important ways from programs in other states or from programs nationally. Thus the generalizability of this study's findings to other populations remains a

question. Another limitation centers on the interview methodology. Although steps were taken to train interviewers thoroughly prior to data collection (e.g., memorization of definitions, inter-rater agreement measure, definitions checklist), it is possible that an unknown degree of error was introduced into the data due to differences between individual data collectors' coding (observer drift). Data from 11 surveys were deleted from the data set prior to analysis due to clear errors in data coding. It is possible that other undetectable errors were not identified.

Another limitation of this study is a definitional issue. In the current study, physical presence in settings with non-disabled peers was used as a proxy for educational integration. It is acknowledged that physical presence with non-disabled peers does not ensure meaningful integration. It is possible that children in integrated settings could be equally segregated from an educational standpoint as children who are physically segregated. However, physical presence was used as an indicator of educational integration for two reasons. First, lack of physical presence with typical peers certainly does preclude educational integration. Thus, for the majority of children who receive little or no integration time, it is safe to assume that integration is not occurring. Second, measuring the "meaningfulness" of integration activities would require a qualitative analysis that was far beyond the scope of the current investigation. Hence, a decision was made to use physical presence as a measure of integration and to defer the qualitative analysis to a future study. In this study, inferences related to program restrictiveness rest squarely on the validity of the assumption that more time with typical peers is related to less restrictiveness and less time with typical peers is related to more restrictiveness.

Future Directions

This study will serve as a baseline for analyzing changes over time in the implementation of LRE considerations in ECSE. Updates to the information will be gathered on a regular basis and longitudinal data will be published. Additional projects related to the current data are currently under consideration. These include:

- Examining issues related to provision and utilization of funding when community-based services are provided;

- Examining the effectiveness of the services provided by other service provision agencies;
- Examining LRE issues qualitatively to determine the nature of integration activities in ECSE programs;
- Examining the availability of community-based programming options within Iowa for young children with disabilities; and
- Examining the ratios of mild to moderate/severe disabilities in co-location programs.

For more information regarding this study, interested readers should contact Joan Turner Clary or David Tilly at the Iowa Department of Education, Bureau of Special Education (515) 281-3176.

References

Iowa Department of Education, Bureau of Special Education (1993). Iowa procedures for the provision of early childhood special education programs and services in the least restrictive environment. Des Moines, Iowa: Author.

Sulzer-Azaroff, B., & Mayer, G. R. (1991). Behavior Analysis for Lasting Change. Chicago: Holt, Rinehart, & Winston, Inc.

APPENDIX A

ECSE Survey

Opening remarks: My name is _____. I am assisting _____ AEA and the Iowa Department of Education, Bureau of Special Education in conducting a survey. This project involves phone interviews to collect information on the status of various program models being implemented in each AEA and across the state. These data will be used to show changes in the delivery of early childhood special education services over time and to assist in long-range planning.

A Child in your program has been selected as part of a random sample of preschool children being provided special education services. I would like to ask you a series of questions about _____. The interview will take about 8 minutes. The data will be submitted without the child's name to ensure confidentiality. Is this a convenient time for you to complete the phone interview?

Child Name _____ Student # _____

(Optional) Parent's Name _____ Parent's Phone _____

_____ Unable to conduct interview for this student (e.g., child moved or is deceased, teacher unavailable).

SETTINGS WHERE SERVICES ARE DELIVERED

For the purpose of this question, consider all of the settings that _____ physically receives special education services. (*Pause*)

I am going to read a list of settings where special education services might be delivered. For each potential setting, please respond *YES* or *NO* to the question of whether _____ receives special education services in that type of setting. Respond *YES* only to the setting where _____ receives special education services.

1. Head Start	Yes / No	7. Preschool Sponsored by LEA	Yes / No
2. Community-Based Preschool	Yes / No	8. Home	Yes / No
3. Community-Based Child Care	Yes / No	9. In-Patient Hospital Setting	Yes / No
4. At-Risk Classroom	Yes / No	10. Residential Setting	Yes / No
5. Chapter 1 Early Childhood Class	Yes / No	11. EC Self-contained Special Education Classroom	Yes / No
6. Kindergarten	Yes / No	12. Other _____	Yes / No

13. Number from above	What is the name of the school or facility (and classroom if relevant) where _____ is placed in _____ program?	Name of key provider?

PROGRAM MODEL

Item	Response
14. Which of the following Special Education models best describes the program that _____ receives? Please identify one program only.	1. Self-contained early childhood special education program (1 to 5 ratio) 2. Self-contained early childhood special education program (1 to 8 ratio) 3. Co-location 4. Special education instructional intervention in a center-based early childhood program 5. Reverse integration program 6. In-patient hospital setting 7. Residential setting 8. Self-contained early childhood special education program (1 to 5 ratio) and special education instructional intervention in a center-based early childhood program 9. Self-contained early childhood special education program (1 to 8 ratio) and special education instructional intervention in a center-based early childhood program

I am going to read to you a description of _____'s program model. Please tell me if this description matches the program model _____ is in. (*Program model described by respondent should match the definitions listed on pages 2 and 3 of the Overview and Definitions paper.)*

LEAST RESTRICTIVE ENVIRONMENT

Now I am going to ask some questions about the nature of the Special Education services that are provided to _____.

15. How many MINUTES per week does _____ receive Special Education Services?	Minutes
16. How many MINUTES per week does _____ receive Special Education Services with nondisabled peers in all program models?	Minutes
17. How many DAYS per week does _____ receive Special Education Services with nondisabled peers?	Minutes
18. How many DAYS per week does _____ receive General Education Services in a program sponsored by the school district?	Minutes

Complete the next items only if the following models are being provided to this child:

#4 Special education instructional intervention in a center-based early childhood program
#9 Self-contained early childhood special education program (1 to 5 ratio) and special education instructional intervention in a center-based early childhood program
#10 Self-contained early childhood special education program (1 to 8 ratio) and special education instructional intervention in a center-based early childhood program

MONITORING OF SERVICES

Item	Response
21. Who is the person responsible for monitoring _____'s special education program?	Name:
22. What is this person's professional title?	1. Special Education Teacher 2 Special Education Consultant 3. School Psychologist 4. Social Worker 5. Occupational Therapist 6. Physical Therapist 7. Speech/Language Pathologist 8. Itinerant Vision Teacher 9. Home Interventionist 10. LRE Facilitator 11. Integration Specialist 12. General Education Teacher
23. What type of agency does this person work for?	(Circle One) AEA LEA Other _____

Thank you for your time and assistance with this project.

APPENDIX B

PROGRAM MODEL DEFINITIONS

Special education refers to all the educational services that are delivered and are listed on the IEP.

Examples:
A child may be in a typical early childhood setting in which IEP goals and objectives are being worked on and special education consultation is being provided. The services in the typical early childhood program would be considered special education if they are described on the IEP.

Participation in any early childhood special education classroom would be considered special education.

General education refers to participation in a general education setting without special education services or consultation in that setting.

Examples:
A child enrolled in kindergarten without any special education interventions or consultation would be considered a general education placement. The IEP would list this service as general education.

DESCRIPTORS OF PROGRAM MODELS FOR THE ECSE SERVICES STUDY

1. ECSE Classroom (1:5)

Does _____ attend a ***Self-contained special class?***
•5 children with severe disabilities (weighted 3.52)
- Designed primarily for children with disabilities.
- Programs may provide opportunities for integration less than 2 days per week and less than 300 minutes per week.

2. ECSE Classroom (1:8)

Does _____ attend a ***Self-contained special class with little integration?***
• 8 children (mild and moderate disabilities (weighted 2.35)
- Designed primarily for children with disabilities.
- Programs may provide opportunities for integration less than 2 days per week and less than 300 minutes per week.

3. Co-location

Does _____participate in a program that combines the services of an early childhood special education (ECSE) classroom and a community-based early childhood program?

- The program may be child care or preschool. The program may be publicly funded or fee-based.
- Combined in one room or in close proximity to each other, in the ECSE setting, the setting operated by the other agency, or a setting that is shared by both agencies.

- More than 2 agencies may be involved, e.g., LEA and Head Start. May be one agency with multiple sources of funding, e.g., LEA using special education funds and at-risk grant funds to support two models.
- Programs combine children with and without disabilities 2 days per week or more, total minutes per week must be 300 minutes per week or more.
- If two classrooms are involved, interaction among children with and without disabilities may occur in either the typical classroom setting or the special education classroom or both.

4. Special education instructional intervention in a center-based early childhood program

Does _____ attend a center-based early childhood program or community-based program for young children and receive special education instruction and support and related services as described in the IEP?

- Designed primarily for non-disabled young children.
- A licensed ECSE professional monitors the IEP.
- The program may be child care or preschool. The program may be publicly funded or fee-based. The AEA or LEA may be contracting with a fee-based community program.
- The child will be enrolled as a member of the class (not attending as part of an entire special education class that is combined with the early childhood program for typical children).

5. Reverse integration program

Does_____ attend an early childhood special education (ECSE) classroom that also enrolls children without disabilities?

- Designed primarily to serve children with disabilities, with environmental curriculum modifications for meeting the needs of children with and without disabilities.
- The non-disabled peers are identified and recruited by the ECSE program for the purpose of creating a peer component. There is no other program/agency providing administrative structure for the non-disabled peers.
- Programs combine children with and without disabilities 2 days per week or more, total minutes per week must be 300 minutes per week or more.

6. Home instruction

Does_____ receive special education instruction and support services in the home or principal residence of the child's family or caregivers, as described in the IEP or IFSP?

7. In-Patient Hospital Setting

Does_____ receive special education in residential medical facilities on an in-patient basis?

8. Residential Setting

Does_____ receive special education in publicly or privately operated residential schools?

9. Self-contained early childhood special education program (Moderate/Severe) and special education instructional intervention in a community-based early childhood program

Does_____ receive special education in both model #1 and #4 (described above)?

- This model may be called *dual programming* by respondents.
- Both programs must be listed on the IEP. Goals and objectives must be implemented in both settings.
- Example: a child may go to an ECSE classroom (Moderate/Severe) for half a day and to a community-based preschool for the other half day.
- Example: a child may go to an ECSE classroom (Moderate/Severe) 3 days a week and to community-based preschool 2 days a week.

10. Self-contained early childhood special education program (Mild/Moderate) and special education instructional intervention in a community-based early childhood program

Does_____ receive special education in both model #2 and #4 (described above)?

- This model may be called *dual programming* by respondents.
- Both programs must be listed on the IEP. Goals and objectives must be implemented in both settings.
- Example: a child may go to an ECSE classroom (Mild/Moderate) for half a day and to a community-based preschool for the other half day.
- Example: a child may go to an ECSE classroom (Mild/Moderate) 3 days a week and to community-based preschool 2 days a week.

DESCRIPTION OF THE MONITOR ROLE

If the IEP team determines that participation in the CBEC setting is a special education **instructional** service, the IEP **must** be monitored by a licensed early childhood special education professional. Monitoring of the IEP includes these activities:

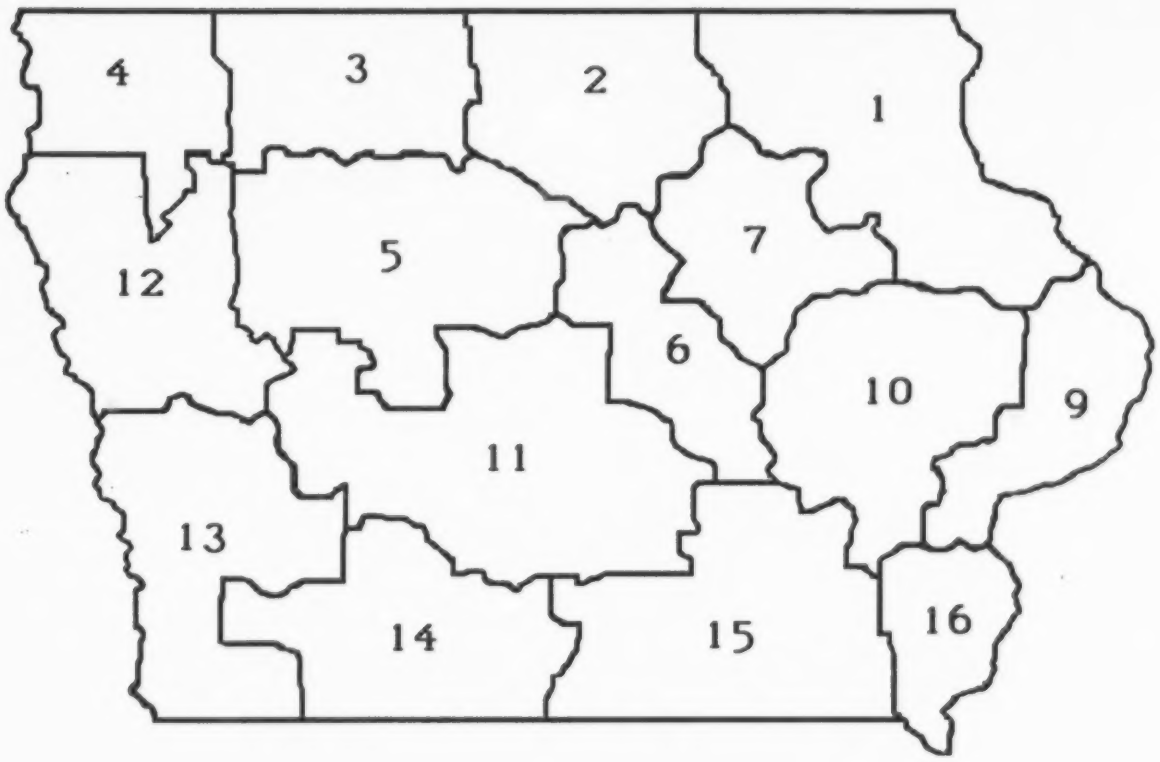
1. participation in the development and subsequent revisions of the IEP.
2. collection and interpretation of formal and informal data to determine whether goals and objectives are being met.
3. on-site observation of the CBEC setting to determine that the conditions of contract between the education agency and the CBEC continue to be met.
4. evaluation of pupil outcomes.

The person who monitors the IEP should:

1. design instructional or therapeutic strategies or both, based on the IEP.
2. provide or assist staff in securing training required to implement the IEP.
3. coordinate teaming activities with CBEC and ECSE personnel.
4. assist with coordinating parent activities.

APPENDIX C

IOWA AEA BOUNDARIES



Note. Boundaries of the AEAs do not reflect population. There is not an AEA 8.